

REMARKS

This response includes no claim amendments; the above claims appear for the convenience of the Patent Office. With that in mind, claims 1-4, 7-9, 11, 14, 15, 16-23, 34-44, and 45-55, stand rejected under 35 U.S.C. 102(b) as being anticipated by McGinnis (US 6,108,996). The McGinnis anticipation rejection covers independent claims 1, 34, and 45, where claim 1 relates to an assembly for reinforcing towers, and claims 34 and 45 relate to tower reinforcing systems. All three of these independent claims include explicit limitations to reinforcing legs having end bearing plates that mount to leg flanges at section joints of the existing tower legs. McGinnis utterly fails to teach or suggest this claimed structural feature or anything remotely like it and the anticipation rejection therefore fails as a matter of law.

In more detail, the rejected claims structurally identify the reinforcing leg end bearing plates as mounting to leg flanges of the (existing) tower leg joints. Regarding the instant application, an embodiment of the claimed end bearing plates appears plainly in Fig. 5A, identified by reference numeral 48, and Fig. 8C clearly illustrates a “sandwich” formed at the section joint of an existing tower leg by the abutting (existing) tower leg flanges 32 and the claimed end bearing plates 48 fastened thereto. None of McGinnis’ disclosure, nor any of its figures, even remotely suggest the claimed end bearing plate feature.

In error, the Office Action states that “McGinnis teaches an assembly (31) for reinforcing an existing tower, the assembly comprising: a plurality of reinforcing legs (33) (Fig. 1) having bearing plates configured at each end (no numeral, see on top of Figure 1, connected by bolt 45, for example); and a plurality of braces (35).” (Emphasis added.) The assertion by the Office Action that anything in McGinnis teaches reinforcing legs with end bearing plates is contradicted by the plain language and figures of McGinnis.

First, there is no bolt 45 in Figure 1 of McGinnis. The text of McGinnis states that reference numeral 45 refers to pre-punched holes running along vertical lengths of reinforcing legs 33, which allow braces 43 to bolt to legs 33. Figures 2 and 4 plainly illustrate that McGinnis’

braces 43 are long V- or U-segments that are lengthwise positioned between reinforcing leg 33 and legs 13 of the existing tower 11—see, especially, Figure 4. Notably, the braces 43 fasten along vertical lengths of the existing tower legs 13 and include no plates, flanges, or other features for mounting to existing tower leg flanges. Nor are any such features illustrated for, or described for, the reinforcing legs 33 of McGinnis. The braces 43 simply provide a means for splicing together segments of reinforcing legs 33 along a vertical length of the existing tower legs 13.

The above details sufficiently demonstrate that the Office Action errs in its allegation that McGinnis teaches Applicant's reinforcing legs with end bearing plates, but McGinnis provides further details highlighting substantive differences between it and Applicant's claimed invention. For example, one point that Applicant identifies throughout the instant application's disclosure, and, also in the claims, is that the end bearing plate tie-in with section joint leg flanges of the existing tower allows the Applicant's claimed reinforcing legs to share compressive loads directly with the existing tower. One manifestation of this direct sharing is the ability to use the existing tower's anchor/foundation with Applicant's reinforcing assembly and system.

For example, see Figures 18 and 19 of the instant application and the corresponding specification text, which illustrate reinforcement of the existing tower's base, and highlight the shared compressive loading passing into the base reinforcing legs 102 via the base bearing plates 104, which couple with the bearing plates 42 of the bottommost reinforcing legs. In contrast to this advantageous arrangement, and as further evidence that the compressive load sharing obtained by Applicant's claimed reinforcing legs with end bearing plates is not obtained by McGinnis, the Abstract and other sections of McGinnis make clear that the original tower and the reinforcing tower of McGinnis each has its own foundation.

Indeed, the Abstract of McGinnis succinctly explains that the reinforcing tower of McGinnis is made of spliced-together legs and that braces (43) are used along lengths of the legs to fasten the legs together. The description and drawings of McGinnis make clear that the

tower reinforcing apparatus of McGinnis differs substantially from Applicant's tower reinforcing assembly and system, and that explicit limitations in Applicant's independent claims are not taught or suggested by McGinnis. As a matter of law, then, McGinnis cannot stand as an anticipating reference under 35 U.S.C. 102, and the Patent Office must withdraw all such rejections.

With the failing of McGinnis to teach or suggest explicit limitations in all independent claims, the use of McGinnis by the Patent Office to reject dependent claims 5 and 6 as obvious necessarily fails as a matter of law. Similarly, the rejection of claims 12 and 13 as obvious over the combination of McGinnis and Heim (US 6,745,539) fails for the same reason.

However, Applicant believes further comment on the obviousness rejection involving the combination of McGinnis and Heim aids efficient prosecution on the merits. Heim teaches a lattice tower of the sort that may benefit from reinforcement. Heim's tower includes mounting plates (14, 16, 18, ...)—see col. 2, lines 53-60—which form tower leg section joints. In attempting to combine Heim with McGinnis, the Office Action explicitly acknowledges that McGinnis does not teach end bearing plates at an angle normal to the legs (Office Action, p. 5, ¶ 3). Indeed, the Office Action states that McGinnis teaches a bearing plate that is “attached parallel to the longitudinal axis of the reinforcing legs,” but that it would have been obvious to replace that element with a flat bearing plate normal to the reinforcing leg longitudinal axis.

The Patent Office's position, as revealed in the McGinnis/Heim obviousness argument is remarkable for two reasons. First, it acknowledges that McGinnis's “bearing plates” run lengthwise with the longitudinal axis, which reinforces Applicant's argument that the Patent Office is mischaracterizing the lengthwise splicing brackets 43 of McGinnis as “end bearing plates.” Second, by saying that it would be obvious simply to wholesale replace McGinnis' splicing brackets 43 with Applicant's end bearing plates overlooks the fact that McGinnis discloses an overall reinforcing system, which relies on the use of a second reinforcing tower having vertically spliced reinforcing legs running vertically parallel to an existing tower, carrying

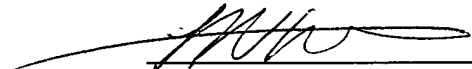
its own weight and resting on its own foundation. In essence, the Patent Office's position is revealed as no more than the conclusory, unsupported position that it would be "obvious" to change fundamental structural and installation details of McGinnis' tower reinforcing system to arrive at Applicant's claimed invention.

With the above arguments in mind, Applicant acknowledges that McGinnis includes teaching directed to tower reinforcement. However, Applicant did not generically claim the bare idea of tower reinforcement; rather, Applicant described and claimed a tower reinforcing assembly and system having advantageous details that patentably define over the cited references. As such, Applicant believes that the instant application stands in condition for immediate allowance and looks forward to the next communication by the Patent Office.

Respectfully submitted,

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